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10/512,087	04/07/2005	Kiyoaki Takiguchi	261189US6PCT	9110
22850	7590	04/18/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.			PARK, EDWARD	
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ALEXANDRIA, VA 22314			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/512,087	Applicant(s) TAKIGUCHI, KIYOAKI	
	Examiner EDWARD PARK	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 59-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 59-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is responsive to applicant's amendment and remarks received on 1/8/08.

Claims 59-74 are currently pending.

Claim Objections

2. In response to applicant's amendment of claim 60, the previous claim objection is withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 59-62, 64-68, 70-73** are rejected under 35 U.S.C. 102(b) as being anticipated by Miura et al (US 2002/0028004 A1).

Regarding **claim 59**, Miura teaches a biometric pattern detecting device comprising:
a light source unit configured to emit a light to be reflected or scattered in a part of body (Miura:
figure 5, numeral 2);

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and a detecting unit configured to detect an image of the light reflected or scattered in the part of body by the light source unit (Miura: figure 5, numeral 4) and generate a biometric pattern using the detected image (Miura: figure 9), wherein the light source unit is set in a horizontal direction or a horizontally slanted direction with respect to the part of body (Miura: figure 5, numeral 2) and the detecting unit is set in a vertical direction or a vertical slanted direction with respect to the part of body (Miura: figure 5, numeral 4).

Regarding **claim 60**, Miura teaches detecting unit detects the image of the light reflected or scattered in the body on the different position from the position of the light emitted by light source unit (Miura: figure 5).

Regarding **claim 61**, Miura teaches wherein the part of body is a finger or a hand (Miura: figure 5, numeral 20).

Regarding **claim 62**, Miura teaches wherein the biometric pattern is a pattern of blood vessels (Miura: paragraph [0033]).

Regarding **claim 64**, Miura teaches a guide unit set between the detecting unit and the part of body (Miura: figure 5, numeral 1).

Regarding **claim 65**, Miura teaches a personal authentication device comprising:
a light source unit configured to emit a light to be reflected or scattered in a part of body (Miura: figure 5, numeral 2);
a detecting unit configured to detect an image of the light reflected or scattered in the part of body by the light source unit (Miura: figure 5, numeral 4) and for generating a biometric pattern using the detected image (Miura: figure 9);
a storage unit configured to store a biometric pattern (Miura: paragraph [0008]); and

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an authentication unit configured to perform an authentication process by comparing the biometric pattern generated by the detecting unit with the biometric pattern stored by the storage unit (Miura: figure 9), wherein the light source unit is set in a horizontal direction or a horizontally slanted direction with respect to the part of body (Miura: figure 5, numeral 2) and the detecting unit is set in a vertical direction or a vertical slanted direction with respect to the part of body (Miura: figure 5, numeral 4).

Regarding **claim 66**, Miura teaches detecting unit detects the image of the light reflected or scattered in the body on the different position from the position of the light emitted by light source unit (Miura: figure 5).

Regarding **claim 67**, Miura teaches wherein the part of body is a finger or a hand (Miura: figure 5, numeral 20).

Regarding **claim 68**, Miura teaches wherein the biometric pattern is a pattern of blood vessels (Miura: paragraph [0033]).

Regarding **claim 70**, Miura teaches a guide unit set between the detecting unit and the part of body (Miura: figure 5, numeral 1).

Regarding **claim 71**, Miura teaches a method of performing personal authentication, comprising:

emitting a light to be reflected or scattered in a part of body (Miura: figure 5, numeral 2);

detecting an image of the light reflected or scattered in the part of body (Miura: figure 5, numeral 4);

generating a biometric pattern using the detected image (Miura: figure 9);

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performing an authentication process by comparing the generated biometric pattern with a stored biometric pattern (Miura: figure 9), wherein the emitted light is emitted from a horizontal direction or a horizontally slanted direction with respect to the part of body (Miura: figure 5, numeral 2) and the image of the light reflected is detected in a vertical direction or a vertical slanted direction with respect to the part of body (Miura: figure 5, numeral 4).

Regarding **claim 72**, Miura teaches wherein the part of body is a finger or a hand (Miura: figure 5, numeral 20).

Regarding **claim 73**, Miura teaches wherein the biometric pattern is a pattern of blood vessels (Miura: paragraph [0033]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 63, 69, 74** are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura et al (US 2002/0028004 A1) in view of Murakami et al (US 6,483,929 B1).

Regarding **claim 63**, Miura discloses all elements as mentioned above in claim 59. Miura does not teach a near-infrared light.

Murakami teaches a near-infrared light (Murakami: col. 6, lines 42-52)

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Miura reference to utilize a near-infrared light as suggested by Murakami, to “penetrate the skin of the finger and absorb or reflect off the user’s skin and subskin tissues an, specifically, arterial tissues ... [in order for] the reflected light [to be received by the system and converted into an electronic signal, which can then be stored in some electronic format” (Murakami: col. 6, lines 42-52).

Regarding **claim 69**, Miura discloses all elements as mentioned above in claim 65. Miura does not teach a near-infrared light.

Murakami teaches a near-infrared light (Murakami: col. 6, lines 42-52)

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Miura reference to utilize a near-infrared light as suggested by Murakami, to “penetrate the skin of the finger and absorb or reflect off the user’s skin and subskin tissues an, specifically, arterial tissues ... [in order for] the reflected light [to be received by the system and converted into an electronic signal, which can then be stored in some electronic format” (Murakami: col. 6, lines 42-52).

Regarding **claim 74**, Miura discloses all elements as mentioned above in claim 71. Miura does not teach a near-infrared light.

Murakami teaches a near-infrared light (Murakami: col. 6, lines 42-52)

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Miura reference to utilize a near-infrared light as suggested by Murakami, to “penetrate the skin of the finger and absorb or reflect off the user’s skin and subskin tissues an, specifically, arterial tissues ... [in order for] the reflected light [to be received by the system

and converted into an electronic signal, which can then be stored in some electronic format”
(Murakami: col. 6, lines 42-52).

Response to Arguments

7. Applicant's arguments filed on 1/8/08, in regards to **claim 59**, have been fully considered but they are not persuasive. Applicant argues that Miura fails to teach “detecting an image of the light reflected or scattered in the part of the body by the light source”. This argument is not considered persuasive since in figure 5 and paragraph [0033], the CCD cameras pick up vein patterns from the finger. It is well known even to a lay person that light needs to be reflected or scattered for image detecting. Furthermore, the applicant admits in the arguments that the Miura reference “detects light that passes through the body part”. It is well known that not all light is passes through any object and therefore is inherently scattered or reflected. Therefore, the applicant admits that the Miura reference meets the limitations of the claim.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., detector and light source are not substantially straight line relative to the position of the finger) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant argues that the Miura fails to teach the “light source is set in a horizontal direction detecting unit is set in a vertical direction with respect to the part of the body”. This argument is not considered persuasive since in figure 5, it can be seen that the terms horizontal and vertical are subjective since the light source and detecting both have a horizontal and vertical component relative to the finger.

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In regards to claims **60-64, 66-70 and 72-74**, applicant argues that the dependent claims are patentable due to the dependency from claim 59, 65, and 71 respectively. This argument is not considered persuasive since the rejection of claim 59, 65 and 71 stand and the rejection can be seen above.

In regards to **claims 63, 69, and 74**, applicant traverses the rejection without reason. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Examiner notes to see the rejection and arguments above.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWARD PARK whose telephone number is (571)270-1576.

The examiner can normally be reached on M-F 10:30 - 20:00, (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on (571) 272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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